

21. SOME OBSERVATIONS ON GROWTH OF THE TRAVANCORE TORTOISE (*Geochelone Travancorica*)

Since 1977 we have been keeping 2 males and 2 females of *Geochelone travancorica* in captivity. They are housed in concrete floored cages along with birds. They are fed on vegetable scraps, spinach leaves and lucerine grass. The birds are fed "bird seed" and soaked gram and the tortoises were seen eating soaked gram. They were also observed eating a dead parrot, and thereafter they were also fed minced meat.

The tortoises laid eggs on the concrete floor, and these were never damaged. The eggs were collected and placed in a dry terrarium with a tray of water. The terrarium was kept indoors and did not receive direct sunlight.

Eggs were laid for the first time in 1980. On 14 January 1981, three eggs, weighing 47 gm, 46 gm, and 47 gm each were laid. One of these hatched on 11 June 1981. The young weighed 32 gm, but it died soon after hatching. The hatchling looked abnormal, its body being broader than long.

In late January 1983 three eggs were laid, out of which one egg started pipping on 22 June 1983, 16.00 hrs. The hatchling was seen to be upside down. When seen again at 20.00 hrs. the shell had broken, and the tortoise was still upside down. Cockroaches had started attacking the placental remains and unabsorbed yolk sac, hence the hatchling was removed and kept in a polythene bucket with moist moss from the terrarium where the eggs had been kept for incubation. The hatchling was not very active and remained partially within the shell. When seen last on 23rd June at about 22.10 hrs., the yolk sac was still protruding. On 24th June (07.00 hrs.) the hatchling had moved out of the shell, and by evening the yolk sac was absorbed but the suture was not completely closed. When the tortoise had hatched, its body was broader than long but it came to normal shape by 24 June 1983, evening. The young did not survive for more than a week.

In 1985 three eggs were laid on 18 January 1985, and their weights were 47 gms each. The eggs were candled every week. In the late 4th week one was showing definite development. On 7th June 1985 the

OBSERVATION OF LENGTH, WIDTH AND WEIGHT OF THE HATCHLING

Date	Length (cm)	Width (cm)	Weight (gm)
7 June 1985	5.5	6	35
14 June 1985			35
22 June 1985	6	6	35
29 June 1985			43.5
6 July 1985	6.3	6.3	43.5
13 July 1985			43.5
20 July 1985	6.5	6.3	55
27 July 1985			59
3 Aug. 1985	7.1	6.6	64
10 Aug. 1985			67
24 Aug. 1985	7.4	6.7	78
8 Sep. 1985	7.7	7	84
22 Sep. 1985			83

fertile egg started pipping, and next morning the young had hatched. The young tortoise was 5.5 cm. long and 6 cm. broad, weighed 35 gm. and the empty shell 10 gm.

The hatchling was offered Farex mixed with bread and milk several vegetables like tomato, cabbage, lucerine and spinach leaves, cucumber and minced meat in the 4th week. Out of this only Farex mixed with bread and milk was taken regularly, and ripe tomatoes and minced meat were taken occasionally.

The only record of the smallest juvenile, probably an hatchling, is by J. Vijaya (Hamadryad 8, No. 3, page 13) of carapace length 60 mm.

A record was maintained of the weight and size of the young from the day of hatching (7 June 1985).

It was observed that for the first two weeks there was no increase in weight, and the weight increase started from the third week onwards. In the sixth week there was a sudden increase in weight by 11.5 gm. From the sixth week onwards a continuous increase in weight was observed.

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REFERENCES

- VIJAYA, J. (1983): The Travancore Tortoises
Geochelone travancorica. *Hamadryad* 8 (3) : 11-13.